SITE INSPECTION WORK PLAN

FOR

Wisconsin Steel

PREPARED BY

PRE-REMEDIAL UNIT
DIVISION OF LAND POLLUTION CONTROL
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62794

****

CONTENTS

I. SITE INFORMATION

I. GENERAL

Site Name: Wisconsin Steel ILD# 000849737

Site Location: Chicago, Illinois LPC# 0316510002

Workplan prepared by:

Scott Davis

Estimated inspection date: 4/27-29/93 Workplan approved by:

_____

****

II. THE ASSIGNMENT (briefly describe the objectives of the inspection and how they are going to be accomplished).

The purpose of a this Site Inspection is to document site contamination, document the migration pathways contaminants may be transported, and to document affected targets. Soil, sediment, groundwater, and surface water samples will be collected during the inspection for analysis. The objectives for the Site Inspection performed at the Wisconsin Steel site are to attain the necessary information to score the facility for the NPL as soon as possible.

****

III. SITE DESCRIPTION (briefly describe the site, including location, unique geological features, source(s) of contamination, methods of disposal and current status of activities).

Wisconsin Steel is located at the intersection of Torrence Street and 106th Street. The facility operated an integrated steel mill operating from approximately 1877 until 1980. Production facilities used at Wisconsin Steel include a coke battery, blast furnaces, steel production open hearth furnaces and steel finishing blooming and merchant mills.

The site is currently abandoned with only a few original building still standing. There are several piles of rubble mixed with soil dispersed over the site. The Calumet River borders the site on the east side with two slips, for barge loading, extending into Wisconsin Steel property.

Slag from the facility was taken to property north of the main facility and piled. Currently the pile is approximately 1500 feet long and approximately 250 feet wide.

IV. SITE HISTORY (briefly describe the history of the site including previous owners, reported injuries, complaints, gov't action).

Wisconsin Steel was in operation from approximately 1877 until 1980. There have been several finanical organizations involved in owning and operating the facility. The more significant are International Harvester (now Navistar Corp.), Envirodyne Corporation, and the Economic Development Administration (EDA). International Harvester owned and operated the facility until 1977 when it sold the majority of the facility to the Envirodyne Corporation. The Economic Development Administration became involved by guaranteeing a loan to the Envirodyne Corp. On March 31, 1980, Envirodyne filed for bankruptcy and EDA took control of the facility and shutdown the facility.

Currently the EDA owns 90% of the facility and International Harvester (Navistar) owns 10%.

II. SAFETY CONSIDERATIONS

I. PHYSICAL HAZARDS AT SITE (briefly describe any physical hazards that the inspection team may encounter at the site).

Physical hazards at the site include possible unstable surfaces around the excavations and debris piles. There is also a danger of falling into the Calumet River when taking samples from the river.

****

II. CHEMICAL HAZARDS AT SITE (briefly identify those chemicals that are known or are suspected to be present, include their state and physical characteristics).

There are several contaminants that have been found on site. Metals have been found in the soil and in sediments in excations. These metals include lead, zinc, mercury, cyanide, sulfide, copper, manganese, chromium and arsenic. PCBs have also been found on-site. Semivolatiles have been found in the soils including acenaphthylene, acenaphthene, fluorene, phenanthrene anthracene and several others. Volatiles have also been found on-site in groundwater and sediment including, but not limited to, benzene, toulene and xylene.

****

III. DERMAL AND RESPIRATORY PROTECTION (identify the level of personal protection that will be used, including anticipated modifications).

A cyanide meter, sulfide meter and a hnu will be used as air monitoring at all times while the sampling team is on the site. When sampling soil and groundwater, samplers will be in Level C with potential upgrade to Level B in conditions arise.

Level D.....Background

Level C.....Background to 5 mu

Level B.....6 to 50 mu

Level A.....51 and above

IV. EMERGENCY INFORMATION

Nearest Hospital: S. Chicago Comm. Hosp. Phone 312/978-2000

Hospital Location: corner of 93rd & Yates

Ambulance Service: S. Chicago Comm. Hosp. Phone 312/978-2000

Fire Service: Chicago Fire Dept. Phone 911

Police: Chicago Police Dept. Phone 911

****

III. FIELD ACTIVITIES

I. TEAM ASSIGNMENTS

Name	Responsibility
Scott Davis	Project Manager
Ken Corkill	Sampler
Pete Sorensen	Sampler
Bruce Everett	Sampler

II. FIELD WORK PROPOSED (check all that apply)

	Activity	Procedures
X	Ambient Air Sampling (OVA,HNU)	IEPA Methods Manual pp.19-23
X	Groundwater Sampling	IEPA Methods Manual pp.1-5
X	Surface Water Sampling	IEPA Methods Manual pp.6-10
X	Soil/Sediment Sampling	IEPA Methods Manual pp.13-18

_X_ Safety Plan

_X_ Sampling Plan

_X_ Equipment Checklist

_X_ Log Book

_X_ Chain of Custody Record

_X_ Sample Analysis Records

_X_ Photographs

____ Drilling Logs

_X_ Correspondence

____ Personal Interview Tapes of Transcripts

_X_ Maps

_X_ Intrument Calibration Records

_X_ Procurement Documents

_X_ Site Inspection Form (2070-13)

____	Tap Water Sampling	IEPA Methods Manual pp.11-12
____	Slope Determinations	IEPA Methods Manual pp.24-25
____	Water Level Measurements	IEPA Methods Manual p.31
_X_	Perimeter Survey	IEPA Methods Manual p.33
_X_	Site Inspection	IEPA Methods Manual pp.34-39
____	Soil Borings/Well Installation	IEPA Methods Manual pp.26-30
_X_	Public Interviews	IEPA Methods Manual p.40
_X_	Decontamination Procedures	IEPA Methods Manual pp.41-56

IV. SAMPLING

I. PROCEDURES (briefly describe the procedures the inspection team will employ in their collection of environmental samples).

All samples will be collected in accordance with the Illinois Environmental Protection Agency's Site Inspection QAPP. Soil/sediment samples will be collected with stainless steel trowels, groundwater samples will be taken with teflon bailers and surface water samples will be taken using pond samplers.

****

II. LOCATION OF SAMPLES (identify the number of samples, their type and their location. The attached map should identify these locations).

Sample #	Type	Location
X101	soil	park
X102	soil	park
X103	soil	on-site
X104	soil	on-site
X105	soil	on-site
X106	soil	on-site
X107	soil	on-site
X108	soil	on-site
X109	soil	on-site
X110	soil	on-site

X111	soil	on-site
X112	soil	on-site
X113	soil	on-site
X114	soil	on-site
X115	soil	on-site
X116	soil	on-site
X117	soil	pri. yard
X118	soil	pri. yard
X119	soil	pri. yard
X120	soil	pri. yard
X121	soil	pri. yard
X122	soil	pri. yard
X123	soil	pri. yard
X124	soil	pri. yard
X125	soil	pri. yard
X201	sediment	river
X202	sediment	river
X203	sediment	river
X204	sediment	river
X205	sediment	river
X206	sediment	river
X501	waste pile	slag pile
X502	waste pile	slag pile
G101	monit. well	on-site
G202	monit. well	on-site
S101	surf. water	river
S102	surf. water	river

S103	surf. water	river
S104	surf. water	river

****

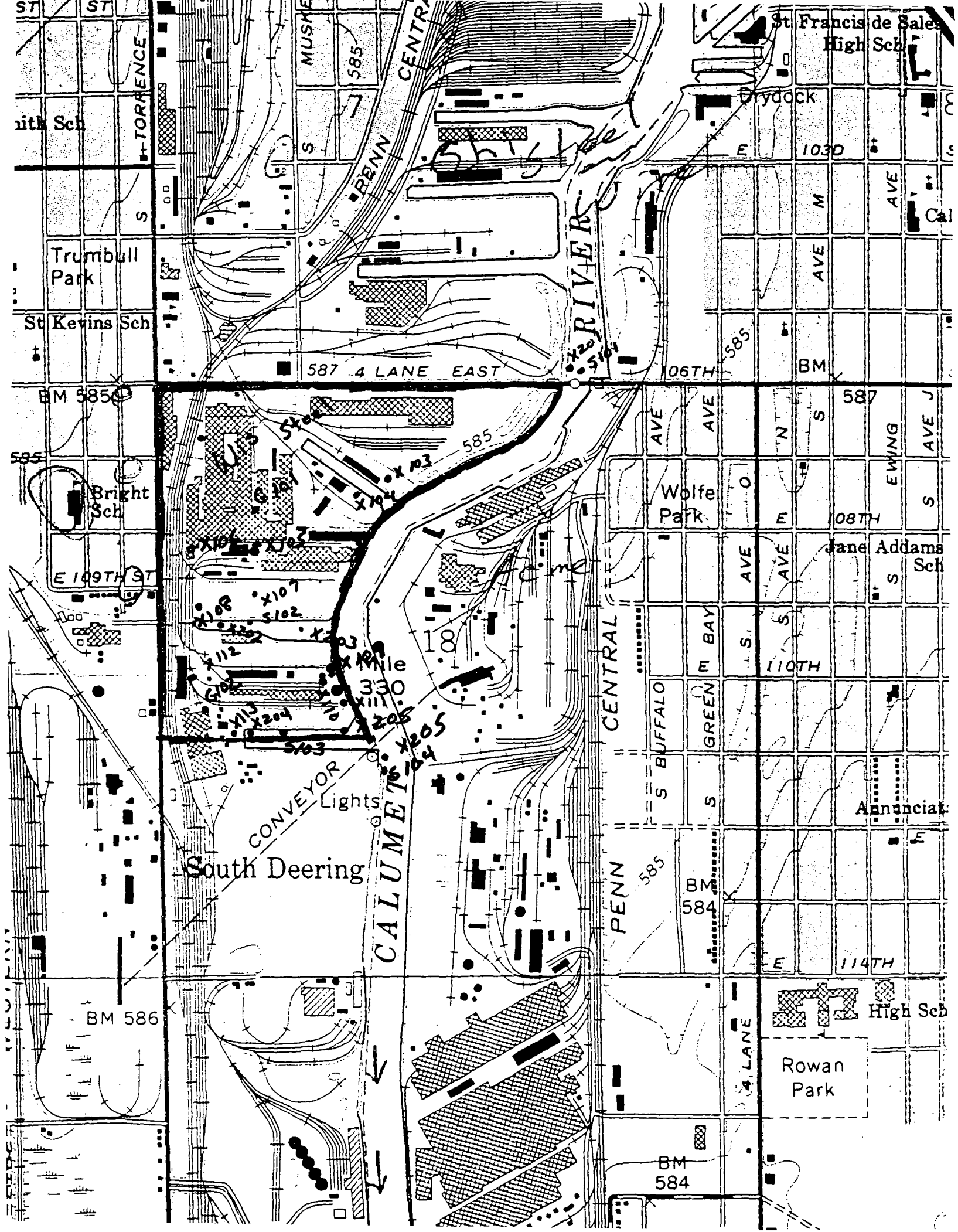
III. ANALYTICAL SERVICES (identify the laboratory that will be performing the analysis of the samples taken at the site, include requested analysis).

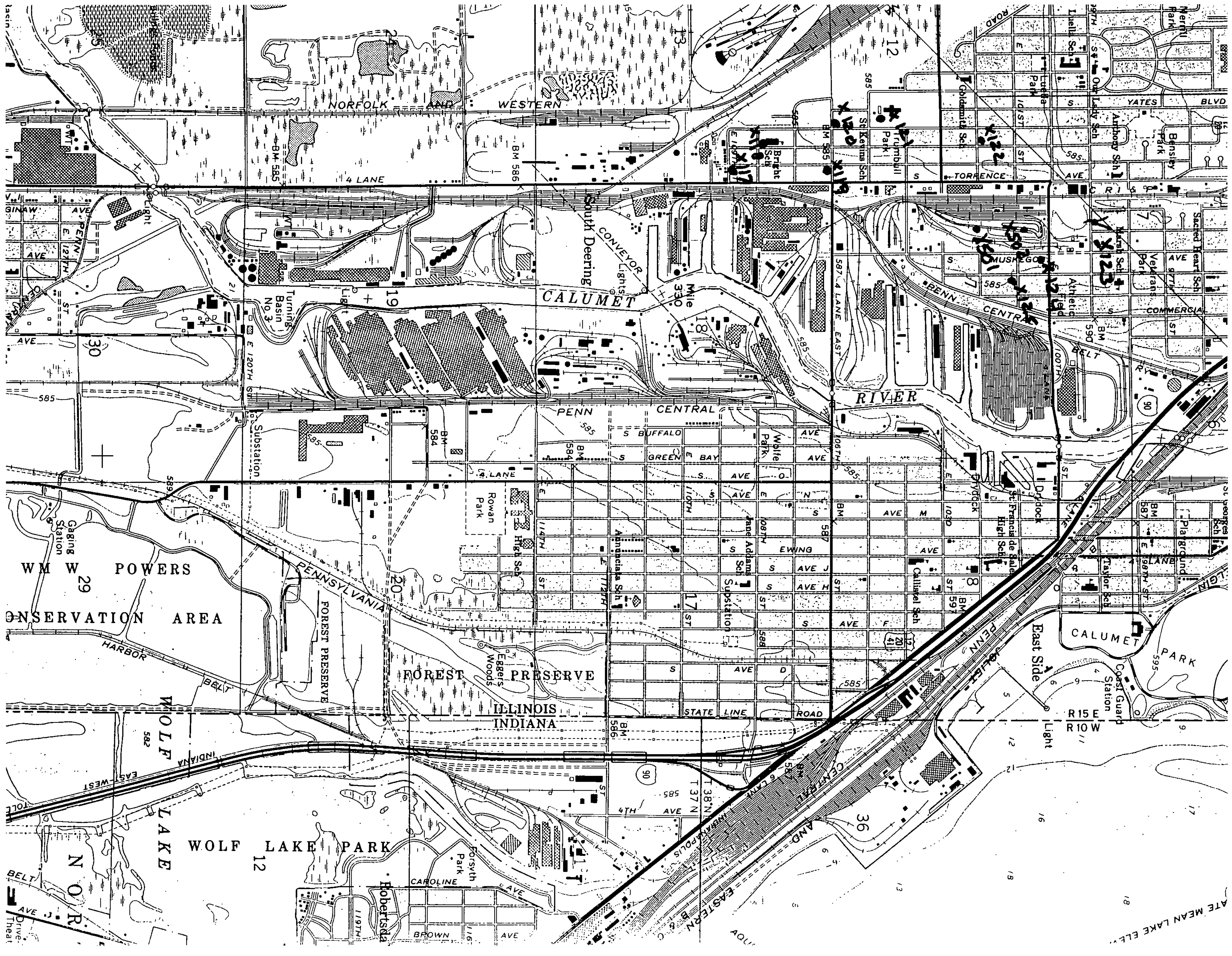
The IEPA lab will be analyzing the samples . All samples will be analyzed for the Target Compound List for the exception of samples X117-X125 will not be sampled for volatiles.

ATTACHMENT I

RECORDS AND DOCUMENTATION (check the records or documents that will be generated during this project)

_X_ Work Plan


St Francis de Sales High Sch
Drydock
E 103D
PENN CENTRAL
RIVER
Trumbull Park
St Kevins Sch
587 4 LANE EAST
106TH
BM
BM 585
585
Bright Sch
E 109TH ST
Wolfe Park
E 108TH
Jane Addams Sch
E 110TH
E 114TH
1 Mile
330
CONVEYOR
Lights
South Deering
CALUMET
PENN
BM 584
BM 586
High Sch
Rowan Park
4 LANE


NORFOLK AND WESTERN
4 LANE
BM 585
BM 586
South Deering
CONVEYOR
Lights
Light
Turning Basin No 3
CALUMET
Mile 330
RIVER
PENN CENTRAL
Substation
BUFFALO AVE
GREEN BAY AVE
White Park
Rowan Park
High Sch
Jane Addams Sch
Annunciata Sch
Calliasel Sch
St Francis de Sales High Sch
Drydock
Taylor Sch
Playground
CALUMET PARK
East Side
Coast Guard Station
WM W POWERS
CONSERVATION AREA
HARBOR BELT
PENNSYLVANIA
FOREST PRESERVE
Eggers Woods
ILLINOIS
INDIANA
STATE LINE ROAD
R15 E
R10 W
T 37 N
T 38 N
WOLF LAKE
WOLF LAKE PARK
Forsyth Park
Robertsdale
CAROLINE AVE
BROWN AVE
4TH AVE
INDIANA EAST-WEST TOLL
INDIANAPOLIS
EASTERN
JOLIET
YATES BLVD
TORRENCE AVE
MUSKEGON
COMMERCIAL
BELT RY
Trumbull Park
St Kevins Sch
Bright Sch
Goldsmith Sch
Luella Park
Luella Sch
Our Lady Sch
Anthony Sch
Bessemer Park
Bensley
Veterans Park
Sacred Heart Sch
Marsh Sch
Athletic Field
EWING AVE
AVE J
AVE H
AVE F
AVE D
AVE M
AVE O
AVE N
ROAD
Gaging Station
PARK
NOR
Drive-in Theat
29
30
19
20
17
18
8
7
12
13
36

SITE INSPECTION WORK PLAN

FOR

Wisconsin Steel

ILD000849737

PREPARED BY

PRE-REMEDIAL UNIT
DIVISION OF LAND POLLUTION CONTROL
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62794

****

CONTENTS

I. SITE INFORMATION

I. GENERAL

Site Name: Wisconsin Steel ILD# 000849737

Site Location: Chicago, Illinois LPC# 0316510002

Workplan prepared by:

Scott Davis

Estimated inspection date: 4/27-29/93 Workplan approved by:

_____

****

II. THE ASSIGNMENT (briefly describe the objectives of the inspection and how they are going to be accomplished).

The purpose of a this Site Inspection is to document site contamination, document the migration pathways contaminants may be transported, and to document affected targets. Soil, sediment, groundwater, and surface water samples will be collected during the inspection for analysis. The objectives for the Site inspection performed at the Wisconsin Steel site are to attain the necessary information to score the facility for the NPL as soon as possible.

****

III. SITE DESCRIPTION (briefly describe the site, including location, unique geological features, source(s) of contamination, methods of disposal and current status of activities).

Wisconsin Steel is located at the intersection of Torrence Street and 106th Street. The facility operated an integrated steel mill operating from approximately 1877 until 1980. Production facilities used at Wisconsin Steel include a coke battery, blast furnaces, steel production open hearth furnaces and steel finishing blooming and merchant mills.

The site is currently abandoned with only a few original building still standing. There are several piles of rubble mixed with soil dispersed over the site. The Calumet River borders the site on the east side with two slips, for barge loading, extending into Wisconsin Steel property.

Slag from the facility was taken to property north of the main facility and piled. Currently the pile is approximately 1500 feet long and approximately 250 feet wide.

IV. SITE HISTORY (briefly describe the history of the site including previous owners, reported injuries, complaints, gov't action).

Wisconsin Steel was in operation from approximately 1877 until 1980. There have been several finanical organizations involved in owning and operating the facility. The more significant are International Harvester (now Navistar Corp.), Envirodyne Corporation, and the Economic Development Administration (EDA). International Harvester owned and operated the facility until 1977 when it sold the majority of the facility to the Envirodyne Corporation. The Economic Development Administration became involved by guaranteeing a loan to the Envirodyne Corp. On March 31, 1980, Envirodyne filed for bankruptcy and EDA took control of the facility and shutdown the facility.

Currently the EDA owns 90% of the facility and International Harvester (Navistar) owns 10%.

II. SAFETY CONSIDERATIONS

I. PHYSICAL HAZARDS AT SITE (briefly describe any physical hazards that the inspection team may encounter at the site).

Physical hazards at the site include possible unstable surfaces around the excavations and debris piles. There is also a danger of falling into the Calumet River when taking samples from the river.

****

II. CHEMICAL HAZARDS AT SITE (briefly identify those chemicals that are known or are suspected to be present, include their state and physical characteristics).

There are several contaminants that have been found on site. Metals have been found in the soil and in sediments in excations. These metals include lead, zinc, mercury, cyanide, sulfide, copper, manganese, chromium and arsenic. PCBs have also been found on-site. Semivolatiles have been found in the soils including acenaphthylene, acenaphthene, fluorene, phenanthrene anthracene and several others. Volatiles have also been found on-site in groundwater and sediment including, but not limited to, benzene, toulene and xylene.

****

III. DERMAL AND RESPIRATORY PROTECTION (identify the level of personal protection that will be used, including anticipated modifications).

A cyanide meter, sulfide meter and a hnu will be used as air monitoring at all times while the sampling team is on the site. When sampling soil and groundwater, samplers will be in Level C with potential upgrade to Level B in conditions arise.

Level D.....Background

Level C.....Background to 5 mu

Level B.....6 to 50 mu

Level A.....51 and above

IV. EMERGENCY INFORMATION

Nearest Hospital: S. Chicago Comm. Hosp. Phone 312/978-2000

Hospital Location: corner of 93rd & Yates

Ambulance Service: S. Chicago Comm. Hosp. Phone 312/978-2000

Fire Service: Chicago Fire Dept. Phone 911

Police: Chicago Police Dept. Phone 911

****

III. FIELD ACTIVITIES

I. TEAM ASSIGNMENTS

Name	Responsibility
Scott Davis	Project Manager
Ken Corkill	Sampler
Pete Sorensen	Sampler
Bruce Everett	Sampler

II. FIELD WORK PROPOSED (check all that apply)

Activity	Procedures
X Ambient Air Sampling (OVA,HNU)	IEPA Methods Manual pp.19-23
X Groundwater Sampling	IEPA Methods Manual pp.1-5
X Surface Water Sampling	IEPA Methods Manual pp.6-10
X Soil/Sediment Sampling	IEPA Methods Manual pp.13-18

____	Tap Water Sampling	IEPA Methods Manual pp.11-12
____	Slope Determinations	IEPA Methods Manual pp.24-25
____	Water Level Measurements	IEPA Methods Manual p.31
_X_	Perimeter Survey	IEPA Methods Manual p.33
_X_	Site Inspection	IEPA Methods Manual pp.34-39
____	Soil Borings/Well Installation	IEPA Methods Manual pp.26-30
_X_	Public Interviews	IEPA Methods Manual p.40
_X_	Decontamination Procedures	IEPA Methods Manual pp.41-56

IV. SAMPLING

I. PROCEDURES (briefly describe the procedures the inspection team will employ in their collection of environmental samples).

All samples will be collected in accordance with the Illinois Environmental Protection Agency's Site Inspection QAPP. Soil/sediment samples will be collected with stainless steel trowels, groundwater samples will be taken with teflon bailers and surface water samples will be taken using pond samplers.

****

II. LOCATION OF SAMPLES (identify the number of samples, their type and their location. The attached map should identify these locations).

Sample #	Type	Location
X101	soil	park
X102	soil	park
X103	soil	on-site
X104	soil	on-site
X105	soil	on-site
X106	soil	on-site
X107	soil	on-site
X108	soil	on-site
X109	soil	on-site
X110	soil	on-site

X111	soil	on-site
X112	soil	on-site
X113	soil	on-site
X114	soil	on-site
X115	soil	on-site
X116	soil	on-site
X117	soil	pri. yard
X118	soil	pri. yard
X119	soil	pri. yard
X120	soil	pri. yard
X121	soil	pri. yard
X122	soil	pri. yard
X123	soil	pri. yard
X124	soil	pri. yard
X125	soil	pri. yard
X201	sediment	river
X202	sediment	river
X203	sediment	river
X204	sediment	river
X205	sediment	river
X206	sediment	river
X501	waste pile	slag pile
X502	waste pile	slag pile
G101	monit. well	on-site
G202	monit. well	on-site
S101	surf. water	river
S102	surf. water	river

S103	surf. water	river
S104	surf. water	river

****

III. ANALYTICAL SERVICES (identify the laboratory that will be performing the analysis of the samples taken at the site, include requested analysis).

The IEPA lab will be analyzing the samples . All samples will be analyzed for the Target Compound List for the exception of samples X117-X125 will not be sampled for volatiles.

ATTACHMENT 1

RECORDS AND DOCUMENTATION (check the records or documents that will be generated during this project)

_X_ Work Plan

_X_ Log Book

_X_ Chain of Custody Record

_X_ Sample Analysis Records

_X_ Photographs

____ Drilling Logs

_X_ Correspondence

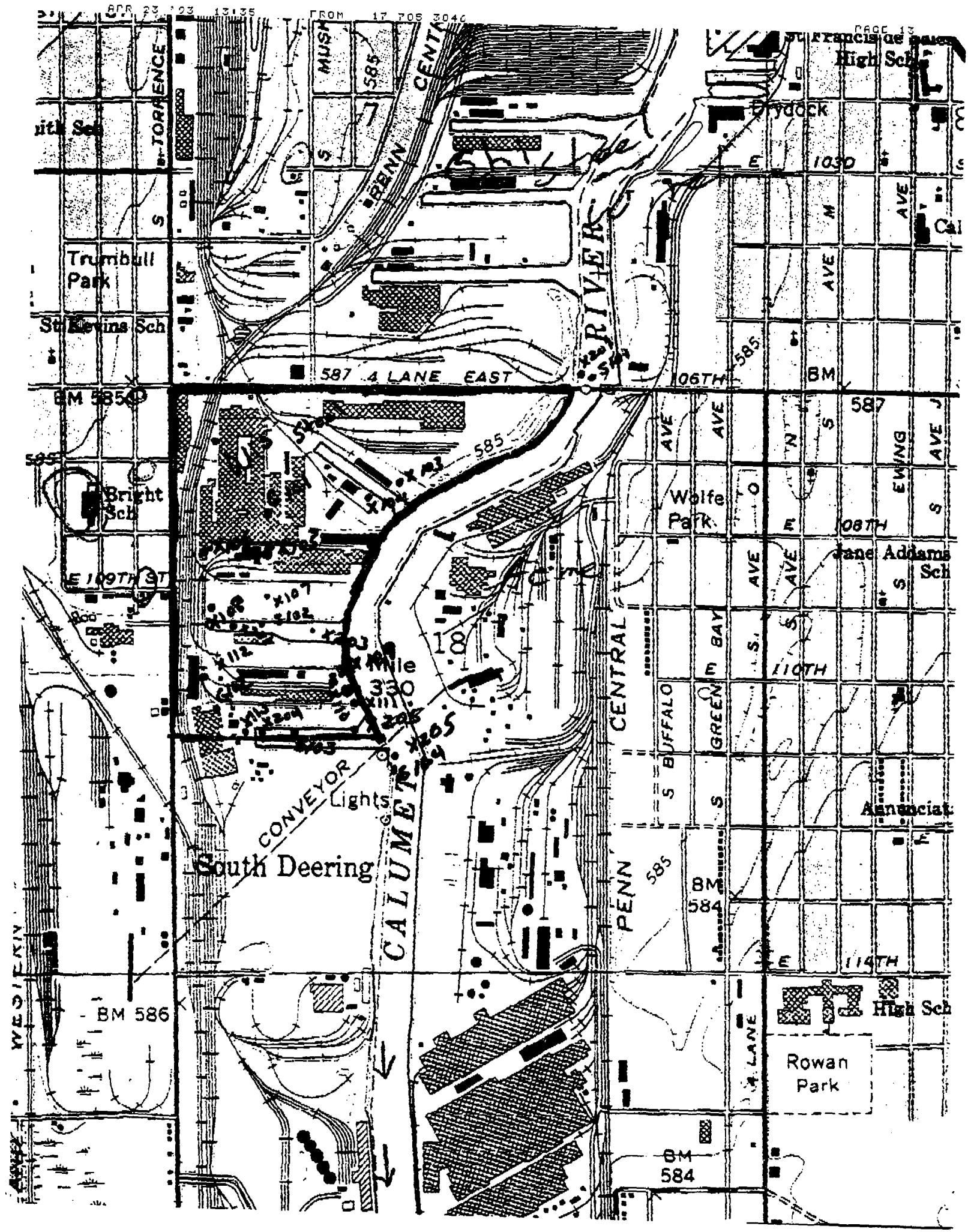
____ Personal Interview Tapes of Transcripts

_X_ Maps

_X_ Intrument Calibration Records

_X_ Procurement Documents

_X_ Site Inspection Form (2070-13)


Trumbull Park
St Kevins Sch
Bright Sch
E 109TH ST
South Deering
CONVEYOR
Lights
CALUMET
RIVER
PENN CENTRAL
587 4 LANE EAST
106TH
108TH
110TH
114TH
Wolfe Park
Jane Addams Sch
Rowan Park
High Sch
Drydock
BM 586
BM 584
BM 585
585
587
1 Mile
3300

ILLINOIS
ENVIRONMENTAL
PROTECTION AGENCY

P.O. BOX 19276
2200 CHURCHILL
SPRINGFIELD, IL 62794-9276

REMEDIAL PROJECT MANAGEMENT SECTION

Date: 4/26/93 Time: 12:00

Please Deliver these 22 pages
including this cover page to:

Name: Alan Altur

Firm or Location: US EPA

Company Phone number:

Fax number: 312 886-0753

From: Scott Davis

IEPA

Memo: Wisconsin Steel Prescore

Office Phone Number:

If you did not receive all of the pages or pages are illegible, please contact us at one of the following numbers a soon as possible.

Our telecopier number is (217) 524-4193
Operator's Phone Number is (217) 524-4863

Printed on recycled paper

EPA Office Use Only

☐ Return to originator after sending

☐ Discard

Record Information

1. Site Name: Wisconsin Steel
   (as entered in CERCLIS)

2. Site CERCLIS Number: 000849737

3. Site Reviewer:

4. Date:

5. Site Location: Chicago, Cook Co., Il.
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Unknown

   Latitude: Longitude:

Site Description

1. Setting: Urban

2. Current Owner: Federal

3. Current Site Status: Inactive

4. Years of Operation: Inactive Site,from and to dates: 1877-1980

5. How Initially Identified: RCRA Notification

6. Entity Responsible for Waste Generation:

   - Manufacturing
     - Inorganic Chem.
     - Primary Metal Industries

7. Site Activities/Waste Deposition:

   - Drum/Container Storage
   - Tanks - Above Ground

Waste Description

8. Wastes Deposited or Detected Onsite:

- Organic Chemicals
- Inorganic Chemicals
- Acids/Bases
- Metals
- Lead
- PCBs

Response Actions

9. Response/Removal Actions:

- Other Removal Action Has Occurred

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- -Treatment,Storage & Disposal Facility
- -90 Day Accumulator

Demographic Information

11. Workers Present Onsite: Yes

12. Distance to Nearest Non-Worker Individual: > 10 Feet - 1/4 Mile

13. Residential Population Within 1 Mile: 0.0

14. Residential Population Within 4 Miles: 0.0

Water Use Information

15. Local Drinking Water Supply Source:

- No Water Withdrawals Within Target Distance Limits

16. Total Population Served by Local Drinking Water Supply Source: Unknown

17. Drinking Water Supply System Type for Local Drinking Water Supply Sources:

    - Unknown

18. Surface Water Adjacent to/Draining Site:

    - Contaminated River

HRS DOCUMENTATION RECORD
Wisconsin Steel - 04/26/93

1. Site Name: Wisconsin Steel
   (as entered in CERCLIS)

2. Site CERCLIS Number: 000849737

3. Site Reviewer:

4. Date:

5. Site Location: Chicago, Cook Co., Il.
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Unknown

   Latitude: Longitude:

	Score
Ground Water Migration Pathway Score (Sgw)	0.00
Surface Water Migration Pathway Score (Ssw)	100.00
Soil Exposure Pathway Score (Ss)	100.00
Air Migration Pathway Score (Sa)	0.00

Site Score	70.71

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: cont. soil

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	cont. soil
b. Source Type	Contaminated Soil
c. Secondary Source Type	N.A.
d. Source Volume (yd3) | Source Area (ft2)	0.00 | 2613600.00
e. Source Volume/Area Value	7.69E+01
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	7.69E+01

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	NO	8.4E+00	ppm
Barium	< 2	NO	2.1E+00	ppm
Benzene	< 2	NO	3.8E+00	ppm
Bis (2-ethylhexyl) phthalate	< 2	NO	1.1E+00	ppm
Cadmium	< 2	NO	3.5E+00	ppm
Chromium	< 2	NO	1.3E+00	ppm
Cyanide	< 2	NO	8.0E+00	ppm
Di-n-butyl phthalate	< 2	NO	8.0E+00	ppm
Lead	< 2	NO	2.8E+00	ppm
Phenanthrene	< 2	NO	3.6E+00	ppm
Phenol	< 2	NO	2.5E+00	ppm

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 4
WASTE QUANTITY
Wisconsin Steel - 04/26/93

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: waste pile

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	waste pile
b. Source Type	Waste Pile
c. Secondary Source Type	N.A.
d. Source Volume (yd3) | Source Area (ft2)	0.00 | 375000.00
e. Source Volume/Area Value	2.88E+04
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.88E+04

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	NO	3.1E+01	ppm
Barium	< 2	NO	4.0E+02	ppm
Chromium	< 2	NO	1.7E+02	ppm
Manganese	< 2	NO	2.0E+00	ppm

WASTE QUANTITY

Wisconsin Steel - 04/26/93

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: lagoon

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

WASTE QUANTITY

Wisconsin Steel - 04/26/93

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	lagoon	
b. Source Type	Surface Impoundment	
c. Secondary Source Type	N.A.	
d. Source Volume (yd3) | Source Area (ft2)	0.00	600.00
e. Source Volume/Area Value	4.62E+01	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	4.62E+01	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
PCBs	< 2	YES	3.0E+00	ppm

WASTE QUANTITY

Wisconsin Steel - 04/26/93

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No.	Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1	cont. soil	SW-SE-A	7.69E+01	0.00E+00	7.69E+01
2	waste pile	GW-SW-SE-A	2.88E+04	0.00E+00	2.88E+04
3	lagoon	CW-SW-SE-A	4.62E+01	0.00E+00	4.62E+01

WASTE QUANTITY

Wisconsin Steel - 04/26/93

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxicity/Mobility	1.00E+03	10000	56
SW: Overland Flow, DW	Tox./Persistence	1.00E+04	10000	100
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	5.00E+08	10000	1000
SW: Overland Flow, Env	Etox./Persis./Bioacc.	5.00E+08	10000	1000
SW: GW to SW, DW	Tox./Persistence	4.00E+02	10000	32
SW: GW to SW, HFC	Tox./Persis./Bioacc.	5.00E+06	10000	320
SW: GW to SW, Env	Etox./Persis./Bioacc.	2.00E+06	10000	320
Soil Exposure:Resident	Toxicity	1.00E+04	10000	100
Soil Exposure: Nearby	Toxicity	1.00E+04	10000	100
Air	Toxicity/Mobility	2.00E-01	10000	6

* Hazardous Waste Quantity Factor Values
** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 1
GROUND WATER MIGRATION PATHWAY SCORESHEET
Wisconsin Steel - 04/26/93

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: glacial till		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	0
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	400
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+03
5. Hazardous Waste Quantity	*	10000
6. Waste Characteristics	100	56
Targets		
7. Nearest Well	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Wellhead Protection Area	20	0.00E+00
11. Targets (lines 7+8d+9+10)	**	0.00E+00
12. Targets (including overlaying aquifers)	**	0.00E+00
13. Aquifer Score	100	0.00
GROUND WATER MIGRATTON PATHWAY SCORE (Sgw)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 2
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	550
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	0
2c. Distance to Surface Water	25	25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	250
3. Potential to Release by Flood		
3a. Containment (Flood)	10	10
3b. Flood Frequency	50	50
3c. Potential to Release by Flood (lines 3a x 3b)	500	500
4. Potential to Release (lines 2d+3c)	500	500
5. Likelihood of Release	550	550
Waste Characteristics		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity	*	10000
8. Waste Characteristics	100	100
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	0.00E+00
12. Targets (lines 9+10d+11)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 3
SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	550
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08
16. Hazardous Waste Quantity	*	10000
17. Waste Characteristics	1000	1000
Targets		
18. Food Chain Individual	50	4.50E+01
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	3.00E-02
19c. Pot. Human Food Chain Contamination	**	0.00E+00
19d. Population (lines 19a+19b+19c)	**	3.00E-02
20. Targets (lines 18+19d)	**	4.50E+01
21. HUMAN FOOD CHAIN THREAT SCORE	100	100.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	550
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+08
24. Hazardous Waste Quantity	*	10000
25. Waste Characteristics	1000	1000
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	0.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	0.00E+00
27. Targets (line 26d)	**	0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.00
29. WATERSHED SCORE	100	100.00
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	100.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 5
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release to Aquifer Aquifer: glacial till		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	0
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	400
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility/Persistence	*	4.00E+02
5. Hazardous Waste Quantity	*	10000
6. Waste Characteristics	100	32
Targets		
7. Nearest Intake	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Targets (lines 7+8d+9)	**	0.00E+00
11. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
12. Likelihood of Release (same as line 3)	550	550
Waste Characteristics		
13. Toxicity/Mobility/Persistence/Bioacc.	*	5.00E+06
14. Hazardous Waste Quantity	*	10000
15. Waste Characteristics	1000	320
Targets		
16. Food Chain Individual	50	4.50E+01
17. Population		
17a. Level I Concentrations	**	0.00E+00
17b. Level II Concentrations	**	3.00E-02
17c. Pot. Human Food Chain Contamination	**	0.00E+00
17d. Population (lines 17a+17b+17c)	**	3.00E-02
18. Targets (lines 16+17d)	**	4.50E+01
19. HUMAN FOOD CHAIN THREAT SCORE	100	96.06

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 7
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Wisconsin Steel - 04/26/93

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
20. Likelihood of Release (same as line 3)	550	550
Waste Characteristics		
21. Ecosystem Tox./Mobility/Persist./Bioacc.	*	2.00E+06
22. Hazardous Waste Quantity	*	10000
23. Waste Characteristics	1000	320
Targets		
24. Sensitive Environments		
24a. Level I Concentrations	**	0.00E+00
24b. Level II Concentrations	**	0.00E+00
24c. Potential Contamination	**	0.00E+00
24d. Sensitive Environments (lines 24a+24b+24c)	**	0.00E+00
25. Targets (line 24d)	**	0.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0.00
27. WATERSHED SCORE	100	96.06
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	96.06

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

PREscore 1.0 - PRESCORE.TCL File 12/23/91 PAGE: 8
SOIL EXPOSURE PATHWAY SCORESHEET
Wisconsin Steel - 04/26/93

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10000
4. Waste Characteristics	100	100
Targets		
5. Resident Individual	50	4.50E+01
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	1.00E+02
6c. Resident Population (lines 6a+6b)	**	1.00E+02
7. Workers	15	5.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	1.50E+02
11. RESIDENT POPULATION THREAT SCORE	**	8.25E+06

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY SCORESHEET
Wisconsin Steel - 04/26/93

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	1.00E+01
13. Area of Contamination	100	1.00E+02
14. Likelihood of Exposure	500	1.25E+02
Waste Characteristics		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	10000
17. Waste Characteristics	100	100
Targets		
18. Nearby Individual	1	0.00E+00
19. Population Within 1 Mile	**	0.00E+00
20. Targets (lines 18+19)	**	0.00E+00
21. NEARBY POPULATION THREAT SCORE	**	0.00E+00
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	100.00

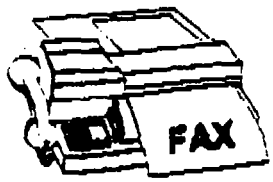
* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

AIR PATHWAY SCORESHEET
Wisconsin Steel - 04/26/93

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	280
2c. Potential to Release	500	280
3. Likelihood of Release	550	280
Waste Characteristics		
4. Toxicity/Mobility	*	2.00E-01
5. Hazardous Waste Quantity	*	10000
6. Waste Characteristics	100	6
Targets		
7. Nearest Individual	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	0.00E+00
10c. Sens. Environments(lines 10a+10b)	***	0.00E+00
11. Targets (lines 7+8d+9+10c)	**	0.00E+00
AIR MIGRATION PATHWAY SCORE (Sa)	100	0.00E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

ILLINOIS
ENVIRONMENTAL
PROTECTION AGENCY



P.O. BOX 19276
2200 CHURCHILL
SPRINGFIELD, IL 62794-9276

REMEDIAL PROJECT MANAGEMENT SECTION

Date: 4-23-93 Time: 3:45 PM

Please Deliver these 15 pages
including this cover page to:

Name: Alan Altur

Firm or Location: US EPA

Company Phone number:

Fax number: 312 886 0753

From: Scott Davis

Memo:

Office Phone Number:

If you did not receive all of the pages or pages are illegible, please contact us at one of the following numbers a soon as possible.

Our telecopier number is (217) 524-4193
Operator's Phone Number is (217) 524-4863

Printed on recycled paper

EPA Office Use Only

☒ Return to originator after sending

☐ Discard

SITE INSPECTION WORK PLAN

FOR

Wisconsin Steel

PREPARED BY

PRE-REMEDIAL UNIT
DIVISION OF LAND POLLUTION CONTROL
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62794

****

CONTENTS

I. SITE INFORMATION

I. GENERAL

Site Name: Wisconsin Steel ILD# 000849737

Site Location: Chicago, Illinois LPC# 0316510002

Workplan prepared by:

Scott Davis

Estimated inspection date: 4/27-29/93 Workplan approved by:

_____

****

II. THE ASSIGNMENT (briefly describe the objectives of the inspection and how they are going to be accomplished).

The purpose of a this Site Inspection is to document site contamination, document the migration pathways contaminants may be transported, and to document affected targets. Soil, sediment, groundwater, and surface water samples will be collected during the inspection for analysis. The objectives for the Site Inspection performed at the Wisconsin Steel site are to attain the necessary information to score the facility for the NPL as soon as possible.

****

III. SITE DESCRIPTION (briefly describe the site, including location, unique geological features, source(s) of contamination, methods of disposal and current status of activities).

Wisconsin Steel is located at the intersection of Torrence Street and 106th Street. The facility operated an integrated steel mill operating from approximately 1877 until 1980. Production facilities used at Wisconsin Steel include a coke battery, blast furnaces, steel production open hearth furnaces and steel finishing blooming and merchant mills.

The site is currently abandoned with only a few original building still standing. There are several piles of rubble mixed with soil dispersed over the site. The Calumet River borders the site on the east side with two slips, for barge loading, extending into Wisconsin Steel property.

Slag from the facility was taken to property north of the main facility and piled. Currently the pile is approximately 1500 feet long and approximately 250 feet wide.

IV. SITE HISTORY (briefly describe the history of the site including previous owners, reported injuries, complaints, gov't action).

Wisconsin Steel was in operation from approximately 1877 until 1980. There have been several finanical organizations involved in owning and operating the facility. The more significant are International Harvester (now Navistar Corp.), Envirodyne Corporation, and the Economic Development Administration (EDA). International Harvester owned and operated the facility until 1977 when it sold the majority of the facility to the Envirodyne Corporation. The Economic Development Administration became involved by guaranteeing a loan to the Envirodyne Corp. On March 31, 1980, Envirodyne filed for bankruptcy and EDA took control of the facility and shutdown the facility.

Currently the EDA owns 90% of the facility and International Harvester (Navistar) owns 10%.

II. SAFETY CONSIDERATIONS

I. PHYSICAL HAZARDS AT SITE (briefly describe any physical hazards that the inspection team may encounter at the site).

Physical hazards at the site include possible unstable surfaces around the excavations and debris piles. There is also a danger of falling into the Calumet River when taking samples from the river.

****

II. CHEMICAL HAZARDS AT SITE (briefly identify those chemicals that are known or are suspected to be present, include their state and physical characteristics).

There are several contaminants that have been found on site. Metals have been found in the soil and in sediments in excations. These metals include lead, zinc, mercury, cyanide, sulfide, copper, manganese, chromium and arsenic. PCBs have also been found on-site. Semivolatiles have been found in the soils including acenaphthylene, acenaphthene, fluorene, phenanthrene anthracene and several others. Volatiles have also been found on-site in groundwater and sediment including, but not limited to, benzene, toulene and xylene.

****

III. DERMAL AND RESPIRATORY PROTECTION (identify the level of personal protection that will be used, including anticipated modifications).

A cyanide meter, sulfide meter and a hnu will be used as air monitoring at all times while the sampling team is on the site. When sampling soil and groundwater, samplers will be in Level C with potential upgrade to Level B in conditions arise.

Level D.....Background

Level C.....Background to 5 mu

Level B.....6 to 50 mu

Level A.....51 and above

IV. EMERGENCY INFORMATION

Nearest Hospital: S. Chicago Comm. Hosp. Phone 312/978-2000

Hospital Location: corner of 93rd & Yates

Ambulance Service: S. Chicago Comm. Hosp. Phone 312/978-2000

Fire Service: Chicago Fire Dept. Phone 911

Police: Chicago Police Dept. Phone 911

****

III. FIELD ACTIVITIES

I. TEAM ASSIGNMENTS

Name	Responsibility
Scott Davis	Project Manager
Ken Corkill	Sampler
Pete Sorensen	Sampler
Bruce Everett	Sampler

II. FIELD WORK PROPOSED (check all that apply)

Activity	Procedures
_X_ Ambient Air Sampling (OVA,HNU)	IEPA Methods Manual pp.19-23
_X_ Groundwater Sampling	IEPA Methods Manual pp.1-5
_X_ Surface Water Sampling	IEPA Methods Manual pp.6-10
_X_ Soil/Sediment Sampling	IEPA Methods Manual pp.13-18

____	Tap Water Sampling	IEPA Methods Manual pp.11-12
____	Slope Determinations	IEPA Methods Manual pp.24-25
____	Water Level Measurements	IEPA Methods Manual p.31
_X_	Perimeter Survey	IEPA Methods Manual p.33
_X_	Site Inspection	IEPA Methods Manual pp.34-39
____	Soil Borings/Well Installation	IEPA Methods Manual pp.26-30
_X_	Public Interviews	IEPA Methods Manual p.40
_X_	Decontamination Procedures	IEPA Methods Manual pp.41-56

IV. SAMPLING

I. PROCEDURES (briefly describe the procedures the inspection team will employ in their collection of environmental samples).

All samples will be collected in accordance with the Illinois Environmental Protection Agency's Site Inspection QAPP. Soil/sediment samples will be collected with stainless steel trowels, groundwater samples will be taken with teflon bailers and surface water samples will be taken using pond samplers.

****

II. LOCATION OF SAMPLES (identify the number of samples, their type and their location. The attached map should identify these locations).

Sample #	Type	Location
X101	soil	park
X102	soil	park
X103	soil	on-site
X104	soil	on-site
X105	soil	on-site
X106	soil	on-site
X107	soil	on-site
X108	soil	on-site
X109	soil	on-site
X110	soil	on-site

X111	soil	on-site
X112	soil	on-site
X113	soil	on-site
X114	soil	on-site
X115	soil	on-site
X116	soil	on-site
X117	soil	pri. yard
X118	soil	pri. yard
X119	soil	pri. yard
X120	soil	pri. yard
X121	soil	pri. yard
X122	soil	pri. yard
X123	soil	pri. yard
X124	soil	pri. yard
X125	soil	pri. yard
X201	sediment	river
X202	sediment	river
X203	sediment	river
X204	sediment	river
X205	sediment	river
X206	sediment	river
X501	waste pile	slag pile
X502	waste pile	slag pile
G101	monit. well	on-site
G202	monit. well	on-site
S101	surf. water	river
S102	surf. water	river

S103	surf. water	river
S104	surf. water	river

****

III. ANALYTICAL SERVICES (identify the laboratory that will be performing the analysis of the samples taken at the site, include requested analysis).

The IEPA lab will be analyzing the samples . All samples will be analyzed for the Target Compound List for the exception of samples X117-X125 will not be sampled for volatiles.

ATTACHMENT I

RECORDS AND DOCUMENTATION (check the records or documents that will be generated during this project)

_X_ Work Plan

_X_ Safety Plan

_X_ Sampling Plan

_X_ Equipment Checklist

_X_ Log Book

_X_ Chain of Custody Record

_X_ Sample Analysis Records

_X_ Photographs

____ Drilling Logs

_X_ Correspondence

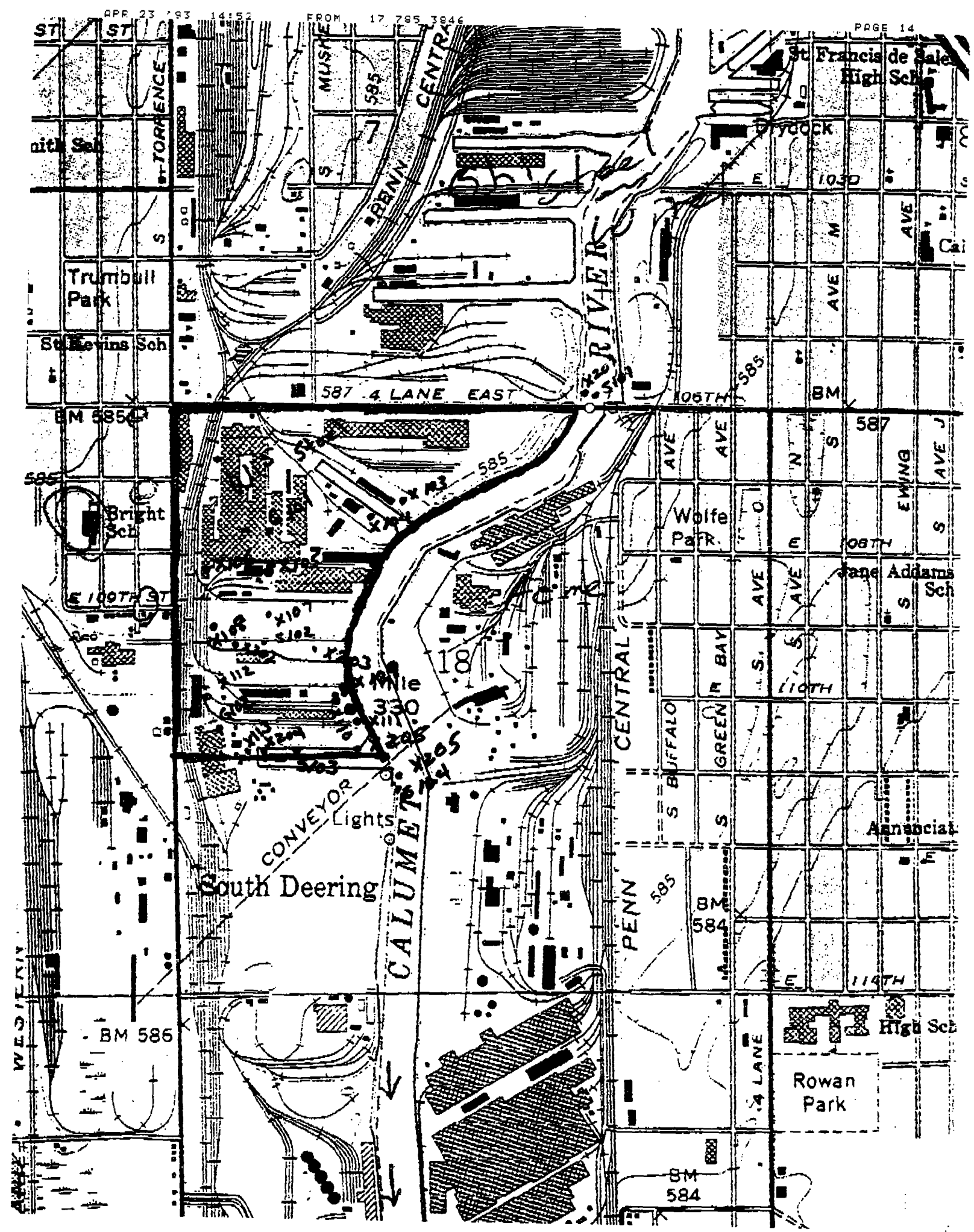
____ Personal Interview Tapes of Transcripts

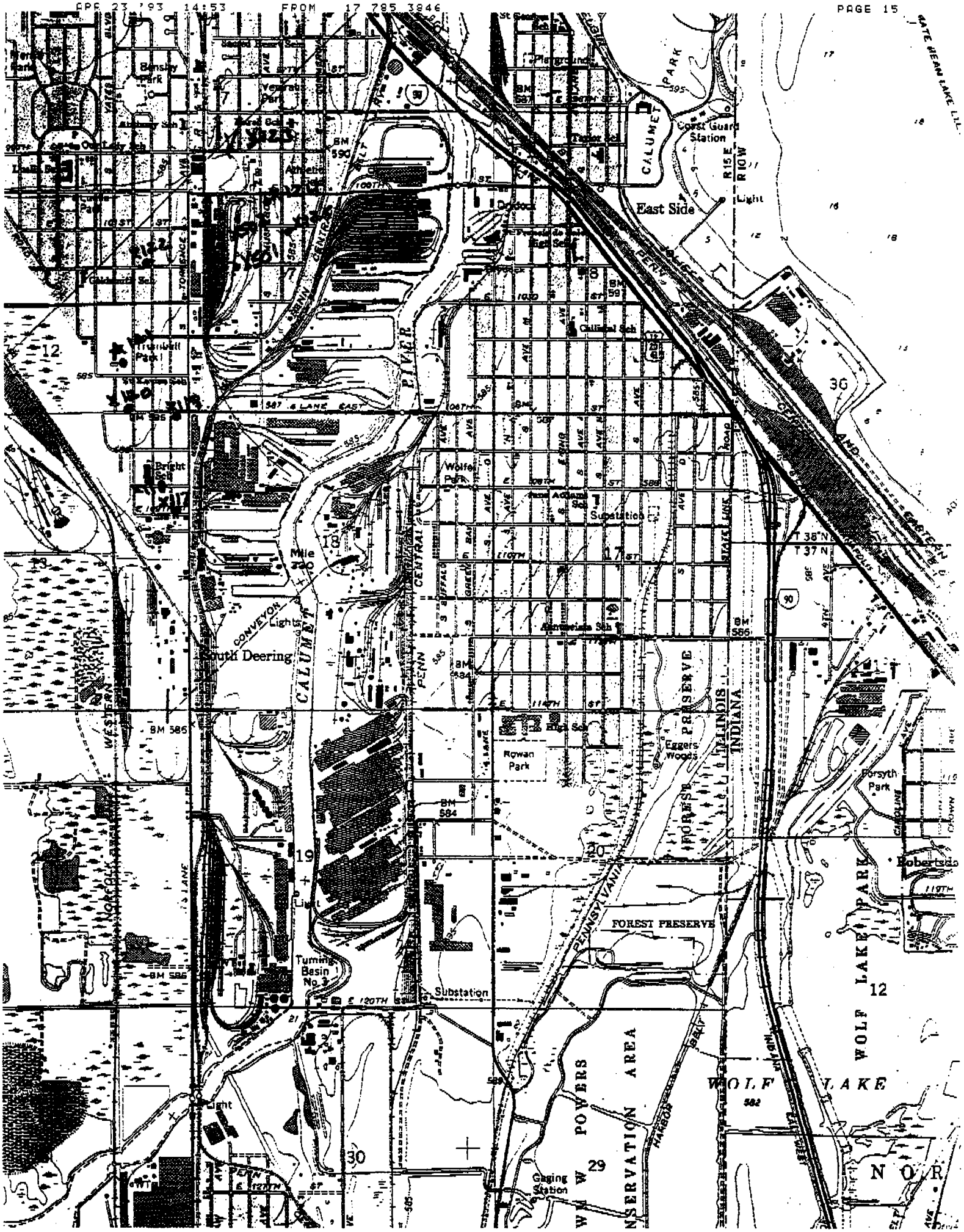
_X_ Maps

_X_ Intrument Calibration Records

_X_ Procurement Documents

_X_ Site Inspection Form (2070-13)


ST
ST
TORRENCE
MUSKE
595
PENN CENTRAL
RIVER
St Francis de Sales High Sch
Drydock
E 103D
AVE M
AVE
Trumbull Park
St Kevins Sch
587 4 LANE EAST
106TH
585
BM
BM 585
587
AVE N
AVE J
EWING
S
Bright Sch
E 100TH ST
Wolfe Park
E 108TH
Jane Addams Sch
AVE
S BAY
S BUFFALO
GREEN
110TH
CENTRAL
CALUMET
CONVEYOR
Lights
South Deering
PENN
BM 584
114TH
BM 586
WESTERN
4 LANE
High Sch
Rowan Park
BM 584


Playground
Coast Guard Station
East Side
Light
Substation
Mile 220
CONVEYOR
South Deering
Light
Rowan Park
Eggers Woods
Porsyth Park
FOREST PRESERVE
Turning Basin No. 3
Substation
Light
Gaging Station
WOLF LAKE
WOLF LAKE PARK
POWERS AREA
CALUMET
PENN CENTRAL
PENNSYLVANIA
ILLINOIS
INDIANA
WESTERN AVE
R15E
R16W
T 38 N
T 37 N